REMARKS

This paper is responsive to any paper(s) indicated above, and is responsive in any other manner indicated below.

REQUEST FOR EXAMINER INTERVIEW BEFORE FURTHER ACTION

In the interest of expediting prosecution of the present application, Applicant respectfully requests that an Examiner interview be scheduled and conducted before a further action is issued with respect to the present application. The Examiner is respectfully requested to contact the attorney indicated on this paper at the local Washington, D.C. area telephone number of 703/312-6600 for the purpose of scheduling an examiner interview. The Examiner is thanked in advance for such considerations. Contact will also be attempted by the undersigned attorneys to schedule an Examiner Interview. In the event that the present papers, in and of themselves, are sufficient to place the application in condition for allowance, no Examiner interview would be necessary.

PENDING CLAIMS

Claims 1, 4-13 and 21 were pending, under consideration and subjected to examination in the Office Action. Appropriate claims have been amended, canceled and/or added (without prejudice or disclaimer) in order to adjust a clarity and/or focus of Applicant's claimed invention. That is, such changes are unrelated to any prior art or scope adjustment and are simply refocused claims in which Applicant is present interested. Added independent claim 22 substantially parallels independent claim 1, with the exception that independent claim 22 is slightly broader in that the

limitations "the predetermined position being the same for said I/O modules" have been omitted (see third paragraphs of such claims). At entry of this paper, Claims 1, 5-8, 10-11 and 21-25 will be pending for further consideration and examination in the application.

CONSTRUCTIVE RESTRICTION/ELECTION REQUIREMENT - TRAVERSED

A constructive restriction/election requirement has been made for the reasons beginning on page 2 of the Office Action. Applicant respectfully traverses. However, the present cancellation of such claims (without prejudice or disclaimer) to lessen issues within the present application and/or to move toward a patent as quickly as possible, has rendered such rejection(s) obsolete. Thus, gratuitous traversal arguments concerning the rejection(s) are omitted for brevity, and further discussions/arguments concerning such rejection(s) are left for the future if/when appropriate. Based upon the following, reconsideration and withdrawal of such rejection(s) are respectfully requested.

The above statements, or any present cancellation of claims (without prejudice or disclaimer), should not be taken as an indication or admission that the rejection was valid, or as a disclaimer of any scope or subject matter, but is merely use of a procedural approach to move toward a patent as quickly as possible.

CLAIM OBJECTIONS OBVIATED VIA CLAIM AMENDMENT

Claims 1 and 21 have been objected to because of the Office Action concerns listed within the "Claim Objections" section on page 4 of the Office Action. As amendments have been made where appropriate in order to address each of the

Office Action listed concerns, reconsideration and withdrawal of the claim objection are respectfully requested.

REJECTION UNDER '112, 2ND PAR. OBVIATED VIA CLAIM AMENDMENT

Claim 1 has been rejected under 35 USC '112, second paragraph, as being indefinite for the concerns listed on page 4 of the Office Action. Appropriate ones of such claims have been carefully reviewed and carefully amended where appropriate in order to address the Office Action listed concerns. As the foregoing is believed to have addressed all '112 second paragraph concerns, reconsideration and withdrawal of the '112 second paragraph rejection are respectfully requested.

REJECTIONS UNDER 35 USC '103 - TRAVERSED

The 35 USC '103 rejections are respectfully traversed. However, such rejections have been rendered obsolete by the present clarifying amendments to Applicant's claims, and accordingly, traversal arguments are not appropriate at this time. However, Applicant respectfully submits the following to preclude renewal of any such rejections against Applicant's clarified claims.

All descriptions of Applicant's disclosed and claimed invention, and all descriptions and rebuttal arguments regarding the applied prior art, as previously submitted by Applicant in any form, are repeated and incorporated hereat by reference. Further, all Office Action statements regarding the prior art rejections are respectfully traversed. As additional arguments, Applicant respectfully submits the following.

Applicant's disclosed and claimed invention is directed toward modular computer system arrangements which allow differing kinds of I/O modules to be easily connected to the system without special handling by a user, and which system is not constrained to a specific bus scheme (i.e., differing types of bus schemes can be used). Applicant's disclosed and claimed invention has several novel and distinguishing features which allow achievement of the above objective, e.g., a "reconfigurable generic bus".

More particularly, as Applicant's arrangements poll I/O modules coupled to its processing unit, the arrangement receives identification information back from each I/O module. That is, each of the I/O modules coupled to Applicant's processing unit may be a differing type of I/O module utilizing different types of bus configuration layouts (e.g., ISA, MCA, EISA, etc.) and device drivers. Applicant's arrangements utilizes the identification information to access a look-up database within memory (see Applicant's FIG. 6, for example), to determine which bus configuration layout and device drivers should be used (e.g., an a generic configurable bus) should be used for each respective I/O module, and then dynamically varies a bus configuration layout and bus drivers for accessing the differing I/O modules.

In terms of distinguishing language, independent claim 1, 21 and 22, for example, recite the features/limitations: "A **modular computer system** formed by connecting a processing module having a processor mounted thereon and a plurality of I/O modules in a stacked form via connectors, **where differing ones of the plurality of I/O modules being differing types of I/O modules from one another, which operate with mutually differing types of bus-layout configurations**, and where **at least a portion of said connectors representing a reconfigurable**

generic bus, ...wherein in accordance with the association of the I/O modules with the identification information, for each differing type of I/O module stacked via the connectors, **said processing module selects from differing preset bus-layout configurations and device drivers from a memory, to dynamically reconfigure the reconfigurable generic bus for accessing the differing type of I/O module**."

Regarding rebuttal of the previously-applied art, Kiremidjian's arrangement appears to be directed to an arrangement which utilizes a **consistent (i.e., unchangeable) bus configuration for each bus**, and accordingly, Kiremidjian would not have disclosed or suggested the above-mentioned ones of Applicant's features/limitations. None of the other applied art or art of record (alone or in combination with Kiremidjian) cures such major deficiency with respect to such primary reference.

As a second important feature, Applicant's invention may use simplistic arrangements to activate each I/O module sequentially (e.g., from closest to farthest, relative to being connected to a processing module). For example, assume that under Applicant's arrangements, each I/O module stacks onto a previously-installed I/O module using a connector (i.e., each I/O module has an input connector, and an output connector). Further, assume that each I/O module is configured to watch for an activating signal on a line/connector-terminal. If an arrangement utilizes a 16-line connector arrangement, then the arrangement may use each distinct line to poll a different I/O module.

In order to avoid the expense/trouble of having I/O modules each customized to look at a differing one of the 16-lines, **Applicant's arrangement (independent claims 1 and 21) requires each I/O module to look at the same predetermined**

line/connector-terminal (e.g., terminal #1), and utilizes a unique and novel shifting approach to rotate the lines to differing connector terminals upon each module-to-module transition. That is, as illustrated by Applicant's FIG. 2, for example, and explained by Applicant's specification text beginning at page 12, line 23, terminal line 1 is connected to terminal 1 of the input connector of the first I/O module layer, but then a predetermined wiring shifting occurs such that line 2 is connected to terminal 1 of the input connector of the second I/O module layer. Such line shifting occurs module-to-module, such that all the lines can be shifted to terminal 1 at one of the layers.

Such arrangement is advantageous because all I/O modules can be configured to look at terminal 1, and a simple (inexpensive) wire shifting method can be used to apply differing lines to differing I/O module layers.

Regarding rebuttal of the previously-applied art, Kiremidjian's arrangement appears to pass its "reset" and "xpin/xpout" through its modules, but appears to always keep the same on the same terminals from module-to-module. None of the other applied art or art of record (alone or in combination with Kiremidjian) cures such major deficiency with respect to such primary reference.

In addition to the foregoing, the following additional remarks from Applicant's foreign representative are also submitted in support of traversal of the rejection and patentability of Applicant's claims.

As to claims 1, 21, the Examiner states "Richman teaches selecting differing bus configurations to access a specific bus, and also teaches selecting device drivers to access I/O modules". In here, as pointed "to access a specific bus" by the Examiner, the cited two references are inventions effective only for specified bus (or

bus access method which is already known) of which bus access method (including bus-sequencer, number and kinds of control signal) is known.

In contrast, as shown from page 19, line 25 to page 20, line 22 in Applicant's English specification, Applicant's invention is applicable for "specifying bus access method" and "defining procedure and timing for controlling system bus signal". According to the unique structure of Applicant's invention, special effects are realized, as compared to the cited references.

As a result of all of the foregoing, it is respectfully submitted that the applied art would not support a '103 obviousness-type rejection of Applicant's claims. Accordingly, reconsideration and withdrawal of such '103 rejections, and express written allowance of all of the rejected claims, are respectfully requested.

EXAMINER INVITED TO TELEPHONE

The Examiner is herein invited to telephone the undersigned attorneys at the local Washington, D.C. area telephone number of 703/312-6600 for discussing any Examiner's Amendments or other suggested actions for accelerating prosecution and moving the present application to allowance.

RESERVATION OF RIGHTS

It is respectfully submitted that any and all claim amendments and/or cancellations submitted within this paper and throughout prosecution of the present application are without prejudice or disclaimer. That is, any above statements, or any present amendment or cancellation of claims (all made without prejudice or

disclaimer), should not be taken as an indication or admission that any objection/rejection was valid, or as a disclaimer of any scope or subject matter. Applicant respectfully reserves all rights to file subsequent related application(s) (including reissue applications) directed to any/all previously claimed limitations/features which have been subsequently amended or cancelled, or to any/all limitations/features not yet claimed, i.e., Applicant continues (indefinitely) to maintain no intention or desire to dedicate or surrender any limitations/features of subject matter of the present application to the public.

CONCLUSION

In view of the foregoing amendments and remarks, Applicant respectfully submits that the claims listed above as presently being under consideration in the application are now in condition for allowance.

To the extent necessary, Applicant petitions for an extension of time under 37 CFR '1.136. Authorization is herein given to charge any shortage in the fees, including extension of time fees and excess claim fees, to Deposit Account No. 01-2135 (Case No. 500.43408X00) and please credit any excess fees to such deposit account.

Based upon all of the foregoing, allowance of all presently-pending claims is respectfully requested.

Respectfully submitted,

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